APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,068	03/01/2002	Torsten Grust	SVL920010034US1	4243

			EXAMINER
23589	7590	02/25/2005	NGUYEN, CINDY

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ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/090,068	GRUST ET AL.
	Examiner	Art Unit	
	Cindy Nguyen	2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _26 October 2004_.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-33_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _08 May 2002_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This is in response to amendment filed 10/26/04.

Response to Arguments

Applicant's arguments filed 10/26/04 have been fully considered but they are not persuasive.

On page 17-19, Applicant argued that Chinnici wholly omits the steps of "receiving queries in a query language and representing the queries in accordance with a declarative language paradigm". In response, the Declarative programming language also called an "applicative language" and a "functional language" (see, e.g., application page 8, line 20) and SOL queries may be constructed from functional language type functions, used as functional languages and treated as a functional language (see, e.g., application page 11, lines 18-19). Therefore, Chinnici clearly discloses receiving queries in a query language[1] (page 3, 0037) and representing the queries in accordance with a declarative language paradigm[2] (page 3, 0038-0039).

Applicant argued that Chinnici wholly omits the steps of "converting the query language to an intermediate declarative representative, and thereafter converting the query to an imperative language representation of the queries and executing the imperative language queries". In response, Chinnici clearly discloses converting the query to an imperative language representation of the

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[1] Receiving queries in a query language as SQL server submit queries to the database server.
[2] Declarative language is defined as functional language (e.g., as SQL), representing the queries in SQL is read as representing the queries in accordance with a declarative language paradigm.

queries and executing the imperative language queries as SQL commands are

transmitted to the application server from the client computer system, the

application server then converts the SQL protocol command to a programming

language call and executes the programming language call (see page 3, 0038).

1.   Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another
filed in the United States before the invention thereof by the applicant for patent, or on an
international application by another who has fulfilled the requirements of paragraphs (1), (2),
and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) do not apply to the examination of this application

as the application being examined was not (1) filed on or after November 29,

2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this

application is examined under 35 U.S.C. 102(e) prior to the amendment by the

AIPA (pre-AIPA 35 U.S.C. 102(e)).

2.   Claims 1-3, 6, 9-11, 14-16, 1921, 24-26 and 29-31 stand rejected under 35

U.S.C. 102(e) as being anticipated by Chinnici et al. (U.S 2002/0188616) (Chinnici).

Regarding claims 1, 9, 24 Chinnici discloses: A method of managing a

relational database comprising:

a. receiving queries in a query language (the client submits these queries

in an SQL format to a database engine for processing, page 3, 0037, Chinnici);

b. representing the queries in accordance with a declarative language

paradigm (a rowset is a database structure containing information that

represents a row or multiple row of a table of the database, page 3, 0038-0039,

Chinnici);

c. converting the queries represented in a declarative language paradigm

to an imperative language queries (the application server then converts the SQL

protocol command or rowset changes to a programming language, page 3,

0038-0039, Chinnici); and

d. executing the imperative language (execute the programming

language, page 3, 0038-0039, Chinnici).

Regarding claim 6, Chinnici discloses: A method of managing a relational

database comprising:

a. receiving queries in a query language (the client submits these queries

in an SQL format to a database engine for processing, page 3, 0037, Chinnici);

b. converting the query language to an imperative language

representation of a declarative language representation of the queries in

accordance with a declarative language paradigm (the application server then

converts the SQL protocol command or rowset changes to a programming

language, page 3, 0038-0039, Chinnici); and

c. executing the imperative language queries (executes the programming

language, page 3, 0038-0039, Chinnici).

Regarding claim 14, Chinnici discloses: A database management system adapted to process queries in a pervasive computing environment, said pervasive computing environment comprising at least one client (14, fig. 1, Chinnici) adapted to interact with a server (20, fig. 1) over connection services, said at least one client controlled and configured to

a. receive queries in a query language (the client submits these queries in an SQL format to a database engine for processing, page 3, 0037, Chinnici);

b. represent the queries in accordance with a declarative language paradigm (a rowset is a database structure containing information that represents a row or multiple row of a table of the database, page 3, 0038-0039, Chinnici);

c. convert the queries represented in a declarative language paradigm to an imperative language (the application server then converts the SQL protocol command or rowset changes to a programming language, page 3, 0038-0039, Chinnici); and

d. execute the imperative language queries (execute the programming language, page 3, 0038-0039, Chinnici).

As per claim 19, all the limitations of these claims have been noted in the rejection of claim 6 and 14. It is therefore rejected as set forth above.

As per claims 24 and 29, it is the program product of claim 1 and 9, all the limitations of these claims have been noted in the rejection of claim 6 and 14. It is therefore rejected as set forth above.

Regarding claims 2, 10, 15, 20, 25, 30 all the limitations of these claims have been noted in the rejection of claims 1, 9, 14, 19, 24 and 29 above, respectively. In addition, Chinnici discloses: comprising converting the query language to an intermediate declarative representative (page 6, 0054, Chinnici), and thereafter converting the query to an imperative language representation of the queries and executing the imperative language queries (page 7, 0063, Chinnici).

Regarding claims 3, 11, 16, 21, 26, 31 all the limitations of these claims have been noted in the rejection of claims 1, 9, 14, 19, 24 and 29 above, respectively. In addition, Chinnici discloses: comprising converting the query language to an imperative language representation of the declarative language and executing the imperative language queries (page 3, 0038, Chinnici).

3.   *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 4, 7, 12, 17, 22, 27 and 32 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chinnici et al. (U.S 2002/0188616) (Chinnici) in view of Steele JR. et al. (U.S 2001/0056420) (Steele).

Regarding claims 4, 7, 12, 17, 22, 27 and 32, all the limitations of these

claims have been noted in the rejection of claim 1, 6, 9, 14, 19, 24 and 29

above, respectively. However, Chinnici didn't disclose: wherein the declarative

language is chosen from the group consisting of ML, LISP, and HASKELL. On

the other hand, Steele discloses: ML, LISP and HASKELL . Thus, at the time

invention was made, it would have been obvious to a person of ordinary skill in

the art to include the ML, LISP, HASKELL in the system of Chinnici as taught by

Steele. The motivation being to enable system uses declarative language (they

can be ML, LISP, HASKELL or a like) due to programming conventions for

converting database record to correspond to the query request as modified by

the client computer system.

5.   **Claims 5, 8, 13, 18, 23, 28 and 33 stand rejected under 35 U.S.C.**

103(a) as being unpatentable over Chinnici et al. (U.S 2002/0188616)

(Chinnici) in view of Agesen (U.S 6711672).

Regarding claims 5, 8, 13, 18, 23, 28 and 33 all the limitations of this claim

have been noted in the rejection of claims 1, 6, 9, 14, 19, 24 and 29 above,

respectively. However, Chinnici didn't disclose: wherein the imperative language

is chosen from the group consisting of C, C++, Java, Modula2, and SmallTalk.

On the other hand, Agesen discloses: wherein the imperative language is

chosen from the group consisting of C, C++, Java, Modula2, and SmallTalk (col.

2, lines 34-49, Agesen). Thus, at the time invention was made, it would have

been obvious to a person of ordinary skill in the art to include the C, C++, Java,

Modula2, and SmallTalk in the system of Chinnici as taught by Agesen. The

motivation being to enable system uses high level programming languages due

to programming conventions for converting database record to correspond to

the query request as modified by the client computer system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of

time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

6.   *Contact Information*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Cindy Nguyen whose telephone number is 703-305-

4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cindy Nguyen

February 22, 2005

FRANTZ COBY
PRIMARY EXAMINER